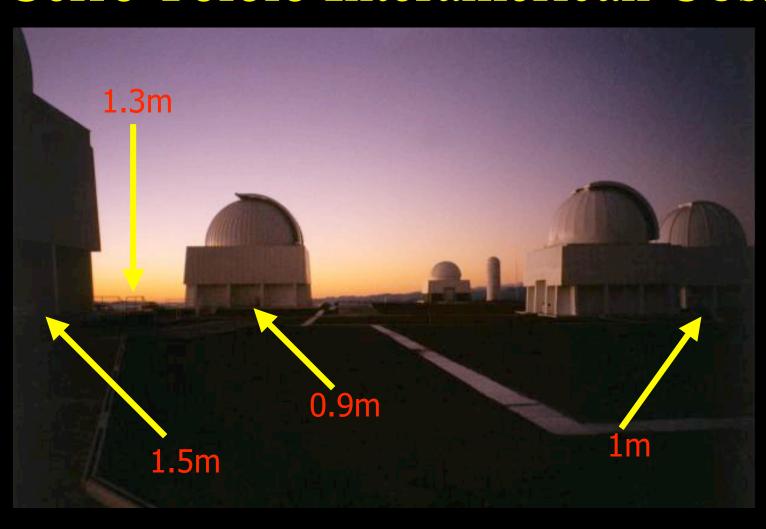
# S.M.A.R.T.S. Cerro Tololo Interamerican Obs.



#### SMARTS Telescopes 2008

- 0.9m + 2KCCD alternating service & user
- 1m + 4KCCD user only
- 1.3m + ANDICAM monitoring queue only
- 1.5m + RCSpec monitoring service/queue
- New high-resolution echelle option on 1.5m begins August 1 – mounted simultaneously with RCSpec

#### **SMARTS** Time Allocation

- 20% for telescopes (NOAO and Yale)
- 20-25% for instruments (NOAO and OSU)
- 55-60% for operating costs and management
- Partnership changes annually and unpredictably new partners with longer term commitments are greatly desired!
- Current cost for cash contributors: K\$/night for user observations; 1.5K\$/night for service
- Costs rising rapidly (inflation and exchange rate)

#### **DES Calibration Options**

- 0.9m: would need new imager problem: longterm (astrometric) projects underway
- 1.0m: would need new imager problem: user runs important for university education programs
- 1.3m: would need new optical CCD problem: monitoring/ToO capability is our most oversubscribed option
- General problem: a new DES-oriented imager is not considered an interesting new capability

### DES Calibration Option 1: A New Telescope

- Sep-Mar for DES; Apr-Aug for SMARTS
- Galactic center our most overloaded time additional imaging capability would be very welcome!
- Possible coordination with LSST
- Problem: resource intensive!! No significant SMARTS contribution to telescope construction is plausible

#### DES Calibration Option 2: A New Instrument for 1.5m

- Imaging/spectrograph for 1.5m tops our priority list for new instruments
- 120 nights/yr likely to be available could work well with existing program, depending on precise DES cadence
- Telescope in good working order service/queue observing already in operation
- Largest aperture SMARTS telescopes more images in given time
- Depoy estimates 500K\$ cost

## Resource Allocation for New Instrument

- New instrument receives 6% of SMARTS time = 65 service nights/year or 97K\$ worth of observing time/year: 500K\$ cost recouped in 5 yrs
- Additional observing time within a year requires additional 1.5K\$/night support
- PREST proposal possible? (Would be especially strong with cost sharing from DES)
- SMARTS contribution of 100-200 K\$ over several years is conceivable but would result in instrument nights reverting to the consortium as a whole

